



Report

of the

Local Board of Health



THE CITY OF EDMONTON

ALBERTA

1946



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Medical Officer of Health.....	Dr. G. M. Little, M.D., D.P.H.
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Chief Health Inspector.....	Methuen, A. P.
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Health Inspector.....	Chase, H. G.
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Health Inspector.....	Kent, Wm.
Health Inspector.....	Milligan, W. A.
Health Inspector.....	Overton, L. B.
Health Inspector.....	Shaw, I. D. F.
Health Inspector.....	Williams, J. D.
Quarantine Officer.....	Anderson, R. T.
Chief Food Inspector.....	Morrison, Dr. D. M., V.S.
Dairy Supervisor.....	Ellinger, C.
Chemist and Milk Inspector.....	Graham, H. C., B.A.
Public Health Nurse.....	Griffith, Miss M., R.N.
Public Health Nurse.....	Christensen, Miss S. C.
Public Health Nurse.....	Thompson, Miss M. E.
Stenographer, sr.....	Derbyshire, Miss K. D.
Stenographer.....	Chernichen, Miss M.
Stenographer.....	Craig, Miss I. C.

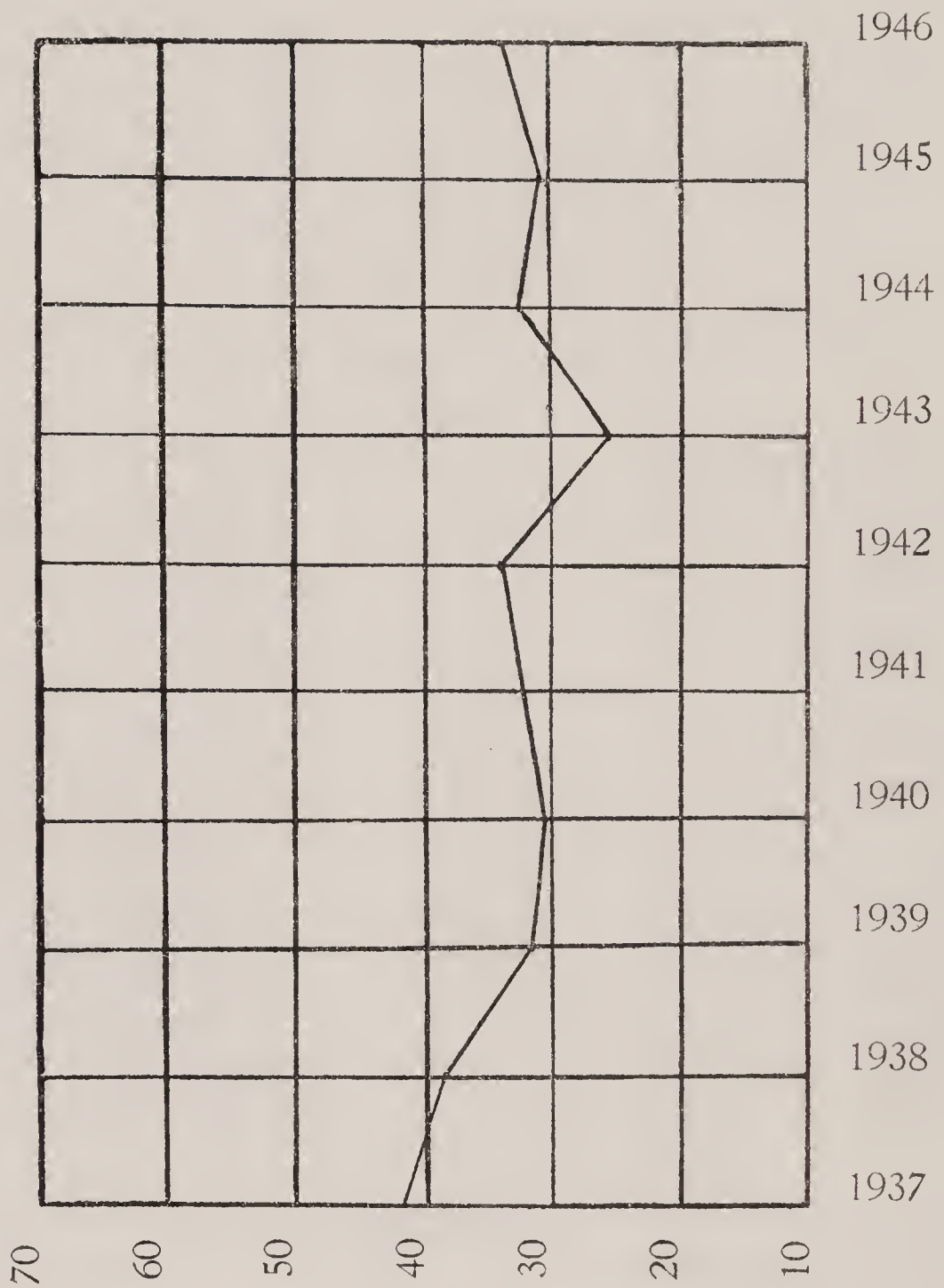
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of Medicine

INFANT MORTALITY

Rate per 1,000 Living Births.



WELLS
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1946

Annual Report of the Medical Officer of Health

Chairman and Members,
Local Board of Health,
Edmonton, Alberta.

Gentlemen:

Herewith is submitted our report for 1946.

Birth Rate:

The birth rate of 28.2 per 1,000 population is the highest in eighteen years. We are still, however, considerably short of the 37.1 per 1,000 reached in 1922.

Death Rate:

A general death rate of 8.4 per 1,000 population was a small increase over the previous year. The increase was more marked, however, in certain individual causes. Heart disease still heads the list with 227.8 deaths per 100,000, as compared to the rate of 207.6 in 1945. Ninety-one per cent of these deaths were forty-five years of age or over. Many people arrive at middle age with some degree of heart damage. An increasing percentage of our population lies in the older age groups. If longevity is hoped for, we must gauge our activities by the ability of damaged or aging heart tissues. A slight reduction in the number of cancer deaths, despite our increased population, is encouraging. If more citizens will avail themselves of the facilities for early diagnosis of this disease offered by the medical profession and the Provincial Cancer Clinic, it is reasonable to expect that we can halt its increasing mortality, even though more and more of our people are living past middle age, when cancer is most prevalent.

External causes advanced to fourth in our list of Principal Causes of Death for 1946. Two classifications under this heading were outstanding. Deaths from automobile accidents increased more than fifty per cent, and suicides were nearly trebled from the previous year. The latter reminds us that the post-war period is a time of difficult readjustment for many of our citizens.

Infant mortality showed a slight increase, and premature birth remains by far the greatest single cause of death in this class. The greatest defence available against these premature births is adequate prenatal care for the mother. Unfortunately, there are still many mothers who make little or no contact with their doctor until the time of confinement has arrived.

Communicable Diseases:

Tuberculosis remains the greatest cause of mortality amongst the communicable diseases. It brings disaster when most victims are in the prime of life and have the greatest family responsibility. Early diagnosis of this disease gives the greatest assurance of cure, and of preventing its spread. We have the means of achieving this in the chest X-ray survey units which the Provincial Tuberculosis Association and the Provincial Department of Health plan on making available to us again late in the summer of 1947. It is to be hoped that all our citizens will avail themselves of this simple and effective protection.

Measles accounted for nearly half the communicable diseases during the year. We have still no effective means of preventing the general spread of measles, but our Provincial Board of Health has made available a serum which will reduce the severity of attack in children under three years of age while still permitting the child to develop a natural immunity. It is at this early age that disasters are most likely to occur in this infection.

Whooping cough reached a remarkably low level of 92 cases for the year. We believe that the effective whooping cough vaccine now in use is in large part accountable for this comforting figure.

Immunization procedures numbering 13,141 were carried out on 4,683 children in our inoculation clinic which is open every afternoon. These were almost entirely babies and pre-school children. The School Medical Services carried out a further 7,562 such procedures in the schools.

It is interesting to calculate the saving our citizens derive from preventive services. Reducing the problem to averages, and adjusting for population, it is evident that preventive measures save our city from having 143 cases of smallpox, 500 cases of diphtheria and 780 cases of typhoid each year, as compared to thirty-five years ago. Aside from the death, disability and loss of earning power involved, this would represent a cost of more than a quarter of a million dollars to our citizens in these three diseases alone.

Child Welfare:

The number of babies and pre-school children under supervision by the Child Welfare Clinic has continued to increase. This service has, we believe, a direct influence upon our favorable infant mortality rate.

An urgent need in our city is more adequate nursing homes for babies whose parents cannot give them personal care.

Sanitation:

Overcrowding of dwelling accommodation still makes proper sanitation difficult in many parts of our city. Despite considerable building activity many of our citizens, particularly these in the lower income group, are not yet adequately housed.

A reinforced sanitary staff has permitted increased supervision of restaurants, stores, food factories and other food handling establishments. Many such establishments are only now emerging from the makeshift period forced upon us by war. Some types of equipment and plumbing are still difficult to obtain.

Constant supervision of our milk supply, with excellent co-operation from producers and distributors, has maintained a safe standard throughout the year. The demand, however, has threatened to overcome the supply at several periods; but with the co-operation of the Board of Public Utilities it is anticipated that an adequate future supply can be assured. The forced increase in cost was a disappointment to us, for we view a low cost milk supply as an outstanding protection to the public health.

General:

I have mentioned the need of homes for the care of babies. There is also an urgent need for more adequate accommodation for aged and infirm citizens. Even where moderate costs can be met, it is practically impossible for some of these older folk to find a suitable home, especially if their infirmity calls for some degree of care. It cannot be denied that some of them spend a grim period waiting to leave this world.

The capacity of the general hospitals of the City have been taxed severely during the year. Development of adequate hospital and medical facilities in the rural areas of our province may prove to be part of the answer to this problem.

We are again grateful to the Provincial Board of Health and the Provincial Laboratory for technical assistance and advice.

Respectfully submitted,

G. M. LITTLE,

Medical Officer of Health.

EXPENDITURE

1.	Salaries	\$ 38,868.41	\$ 36,394.23
2.	Supplies	1,213.09	1,077.61
3.	Transportation	5,846.06	5,360.69
4/6.	Telephones, sundries, uniforms.....	1,261.24	882.24
7.	Pensions	3,699.95	3,071.52
	(Bathhouse included in Acct. 1 and 2.)		
		\$ 50,888.75	\$ 46,786.29

REVENUE

Permits	\$ 554.75		
Meat Inspection	932.60		
License Department	1,500.00		
	\$ 2,987.35.....	2,987.35	3,311.70
		\$ 47,901.40	\$ 43,474.59

EXPENDITURE—CLASSIFIED—1946

	Administration	Communicable Disease	Dairy Inspection	Food Inspection	Laboratory Service	Public Health Nursing	Sanitation	Vital Statistics	Bath House	TOTALS
1. Salaries.....	\$ 7,751.84	\$3,073.58	\$2,539.42	\$3,288.63	\$3,165.35	\$3,381.23	\$14,420.27	\$1,093.42	\$154.67	\$38,868.41
2. Supplies.....	623.89	125.31	15.00		183.94		161.03		103.92	1,213.09
3. Transportation....	400.20	1,134.18	780.00	240.00	600.35	866.11	1,825.22			5,846.06
4. Telephones.....	109.73	65.76	18.00	17.76	23.64	17.88	82.20			334.97
5. Sundries.....	346.64	231.73	5.50	60.20	2.99	23.60	78.07			748.73
6. Uniforms.....		33.23				38.41	105.90			177.54
7. Pensions.....	3,699.95									3,699.95
	\$12,932.25	\$4,663.79	\$3,357.92	\$3,606.69	\$3,976.27	\$4,327.23	\$16,672.69	\$1,093.42	\$258.59	\$50,888.75
	25.4%	9.2%	6.6%	7.8%	7.8%	8.5%	32.8%	2.1%	.5%	100%

SUMMARY OF STATISTICS

Area of City, 26,778 acres including 1,000 acres of water and 2,147 acres in Parks.

	1946	1945	1944	1943	1942
Population.....	114,976	111,745	108,416	105,536	96,725
Persons per acre of land.....	4.2	4.1	4.0	3.9	3.8
Cost per capita.....	.41	.41	.39	.38	.42
School enrolment.....	18,988	17,714	17,623	17,337	17,315
Natural increase of population.....	2,283	1,831	1,622	1,629	1,260
Total births.....	5,455	4,726	4,286	4,083	3,526
Resident births, only.....	3,251	2,695	2,447	2,443	1,972
Rate per 1,000 population....	28.2	24.1	22.6	23.1	20.3
Total stillbirths.....	82	83	61	67	55
Resident stillbirths only.....	51	53	39	33	39
Rate per 1,000 births.....	15.7	19.6	15.9	13.2	19.3
Total deaths.....	1,576	1,425	1,498	1,342	1,195
Resident deaths only.....	968	864	825	841	712
Rate per 1,000 population.....	8.4	7.7	7.5	7.7	7.3
Total deaths under 1 year of age.....	197	159	159	124	127
Resident deaths under 1 year of age....	111	84	82	62	68
Rate per 1,000 living births.....	31.1	31.1	33.5	25.4	34.5
Maternal deaths (city only).....	5	6	3	4	1
Rate per 1,000 births.....	1.5	2.22	1.25	1.63	.25
Marriages.....	2,205	2,098	1,839	1,640	1,590
Rate per 1,000 population	19.1	18.8	17.4	17.6	23.0

VITAL STATISTICS

Births

	1946	1945
Total births	5,455	4,726
Resident births only	3,251	2,695
Male	1,699	1,392
Female	1,562	1,303
Attended by Physician	3,247	2,690
Attended by nurse	---	1
Unattended	4	4
Double births	30	39

Born in institutions—3,237 or 99.5%; born elsewhere—14.

Maternal Parentage:

	1946	1945
Canada	2,732 or 84.1 %	2,160 or 80.2 %
British Isles	291 or 8.9 %	215 or 8.0 %
Europe and Asia	120 or 3.7 %	91 or 7.9 %
U.S.A.	94 or 2.9 %	212 or 3.3 %
Other countries	14 or .4 %	17 or .6 %

Stillbirths

	1946	1945
Total stillbirths	82	83
Resident only	51	53
Male	28	24
Female	23	29
Born in institutions	51	53
Born elsewhere	---	---

Cause of Foetal deaths:

Dystocia	27	20
Prematurity	6	6
Toxaemia of pregnancy	2	2
Malformation	6	11
Placenta and membranes	1	3
Other conditions	9	11

Deaths

	1946	1945
Total deaths	1,576	1,425
Resident deaths only	968	864
Male	595	519
Female	373	345

Racial Origin

	1946	1945
Canada	327 or 33.8 %	326 or 37.8 %
British Isles	350 or 36.1 %	325 or 37.7 %
Europe and Asia	181 or 18.7 %	125 or 14.3 %
U.S.A.	61 or 6.4 %	60 or 7.0 %
Others	49 or 5.0 %	28 or 3.2 %

INFANT MORTALITY

	1946	1945
Total deaths under 1 year	197	159
Resident deaths under 1 year of age	111	84
Male	70	52
Female	41	32
Infant mortality rate per 1,000 living births	34.1	31.1

INFANT MORTALITY, 1946

	SEX		BY MONTH												BY AGE										
	TOTAL	Male	Female	January	February	March	April	May	June	July	August	September	October	November	December	1st Day	1st Week	2nd Week	3rd Week	4th Week	Total Under 1 Month	1- 3 Months	4- 6 Months	7- 9 Months	10-12 Months
33b—Influenza without respiratory complications.....	1		1			1																1			
64 —Enlarged Thymus.....	2	2													1							2			
81a—Simple meningitis.....	4	3	1							1	1	1			1							2		1	1
84a—Mongolism.....	1	1			1												1				1	1			
95c—Carditis.....	1		1					1														1			
106 --Bronchitis.....	1		1				1																		
107 —Bronchopneumonia.....	7	4	3					1	1			1		4				1	1		1	3	1	2	
108 —Lobar pneumonia.....	1		1												1			1			1				
109 --Disseminated pneumonia.....	1	1												1							1				
112 —Status Asthmaticus.....	1		1									1													
119a—Gastro enteritis.....	14	7	7						3			2	2	2	5			1	3		4	6	4		
121 —Ruptured appendix.....	1		1							1												1			
157a—Congenital hydrocephalus.....	4	3	1	2							1			1				2			2	2			
157b—Spina bifida and meningocele.....	1		1										1					1			1				
157d—Other congenital malformations of nervous system.....	3		3	1		1				1							1				1	1			1
157e—Congenital malformations of heart.....	3	3					1								2		1	1			2	1			1
157g—Congenital malformations of digestive system.....	3	1	2							1				2			1				1	1	1		
157m—Other congenital malformations.....	1	1				1										1					1				
158 —Congenital debility.....	3	2	1				2							1		1					1	2			
159 —Premature birth.....	33	21	12	2	3	2		2	2	4	3	1	4	2	8	15	10	5	2		32	1			
160a—Intracranial haemorrhage.....	1	1						1								1					1				
160c—Other injuries at birth.....	7	5	2				3	1		1	2					6	1				7				
161a—Atelectasis.....	12	10	2	1		1		3		1	2	2	2			6	6				12				
161c—Other diseases peculiar to 1st year of life.....	2	2													2	2					.2				
182 —Accidental mechanical suffocation.....	1	1												1								1			
200a—Illdefined and unknown.....	2	2		1		1										2					2				
	111	70	41	7	4	7	7	9	6	10	9	9	9	14	20	34	21	9	8		72	25	7	4	3

PRINCIPAL CAUSES OF DEATHS—1946

1946						1945				
	Total	Male	Female	% of Total Deaths	Rate per 100M Population	Total	Male	Female	% of Total Deaths	Rate per 100M Population
90— 95 Diseases of the heart.....	262	162	100	27.0	227.8	232	155	77	26.8	207.6
15— 55 Cancer and other malignant tumors	146	82	64	15.1	126.9	148	91	57	17.1	132.4
83— Intracranial lesions of vascular origin	97	55	42	10.0	84.3	93	38	55	10.7	83.2
163—198 External causes.....	83	64	19	8.3	72.2	59	42	17	6.8	52.8
157—161 Congenital debility, pre-mature birth, diseases peculiar to first year of life.....	76	51	25	7.8	66.0	55	33	22	6.3	49.3
107—109 Pneumonia and Bronchopneumonia	49	34	15	5.0	42.6	43	30	13	4.9	39.3
13— 22 Tuberculosis, all forms.....	30	13	17	3.0	26.0	28	18	10	3.2	25.0
130—132 Nephritis	23	15	8	2.3	20.0	17	11	6	1.9	15.2
162 Senility	20	10	10	2.0	17.4	17	5	12	1.9	15.2
119—120 Diarrhea and enteritis.....	18	9	9	1.8	15.6	11	8	3	1.2	9.8
	804	495	309	89.1						

MORTALITY FROM HEART DISEASE

Year	Total Deaths	Deaths From Heart Disease	Percentage of Total Deaths	Rate per 100M Population
1946.....	968	262	27.0	227.8
1945.....	864	232	26.8	207.6
1944.....	825	199	24.1	183.5
1943.....	814	202	24.8	191.4
1942.....	712	197	27.7	203.4

MORTALITY FROM CANCER

Year	Total Deaths	Deaths From Cancer	Percentage of Total Deaths	Rate per 100M Population
1946.....	968	146	15.1	126.9
1945.....	864	148	17.1	132.4
1944.....	825	132	16.0	121.7
1943.....	814	121	15.0	114.7
1942.....	712	111	15.6	114.4

MORTALITY FROM INTRACRANIAL LESIONS OF VASCULAR ORIGIN

Year	Total Deaths	Deaths From This Cause	Percentage of Total Deaths	Rate per 100M Population
1946.....	968	97	10.0	84.3
1945.....	864	93	10.7	83.2
1944.....	825	84	10.1	77.5
1943.....	814	74	9.0	70.4
1942.....	712	62	8.7	63.9

MORTALITY FROM PNEUMONIA

Year	Total Deaths	Deaths From Pneumonia	Percentage of Total Deaths	Rate per 100M Population
1946.....	968	49	5.0	42.6
1945.....	864	43	4.9	39.3
1944.....	825	41	4.9	37.8
1943.....	814	47	5.8	44.5
1942.....	712	32	4.6	33.0

MORTALITY FROM TUBERCULOSIS

Year	Total Deaths	Deaths From Tuberculosis	Percentage of Total Deaths	Rate per 100M Population
1946.....	968	30	3.0	26.0
1945.....	864	28	3.2	25.0
1944.....	825	26	3.1	23.9
1943.....	814	20	2.4	18.9
1942.....	712	24	3.3	24.7

MORTALITY FROM EXTERNAL CAUSES

Year	Total Deaths	Deaths From External Causes	Male	Female	Suicide	Homicide	Automobile Accidents	Other Accidents	Percentage of Deaths	Rate Per 100M Population
1946	968	83	64	19	25	1	17	40	8.3	72.2
1945	864	59	42	17	9	....	11	39	6.8	52.8
1944	825	40	31	9	9	....	9	22	4.8	36.8
1943	814	51	40	11	5	....	13	33	6.2	48.3
1942	712	38	27	11	4	1	7	26	5.3	39.0

ISOLATION HOSPITAL

Five hundred and forty-seven patients were admitted, 70 were carried over from 1946 making a total of 617. There were 547 discharged, 15 died and 47 remained in the hospital at the end of the year.

The diseases hospitalized included

Scarlet Fever	184	Erysipelas	24
Scarlet Fever suspects	3	Measles	33
Diphtheria	10	Mumps	47
Diphtheria carriers	8	Rubella	4
Diphtheria suspects	3	Chickenpox	13
Poliomyelitis	51	Whooping Cough	10
Poliomyelitis suspects	25	Vaginitis	3
Meningitis (meningococcic)	6	G. C. Opthalmia	1
Tuberculosis	146	Syphilis	2
Typhoid Fever	2	Septic Sore Throat	7
Typhoid Fever suspect	2	Vincent's Angina	2
Para Typhoid	1	Others	71

The deaths included:

Tuberculosis	1	Poliomyelitis	4
Measles and Pneumonia	1	Meningitis (meningococcic)	1
Measles and Encephalitis	1	Other conditions	7

SCHOOL MEDICAL SERVICES

	Public School Board	R.C. Separate School Board
Complete examinations	4237	654
Number reported with defects	1544	130
Number reported without defects	2693	524
Parents present at examinations	2787	305
Homes visited by nurses	646	70
Talks to classes	160	40

IMMUNIZATION

	Smallpox	Diphtheria	Scarlet Fever	Whooping Cough	Typhoid Fever	Tetanus	Typhus	Cholera	Plague	Schick Test	Dick Test
1946											
Board of Health (cases)	1530	1300	401	1364	60	13	5	5	5	34	59
Board of Health (doses)	1530	4031	2225	5090	190	45	10	10	10	34	59
Public School Board (cases)	2244	2513	.....	.....	.....	.....	.....	.....	.....	.....	.....
Public School Board (doses)	2244	4062	.....	.....	.....	.....	.....	.....	.....	.....	.....
Separate School Board (cases)	284	181	.....	.....	.....	.....	.....	.....	.....	.....	.....
Separate School Board (doses)	284	972	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total cases	4058	3994	401	1364	60	13	5	5	5	34	59
Materials distributed to											
Private Physicians	675	364	42	319	11	.....	.....	.....	.....	1	1
1945											
Board of Health (cases)	611	1161	436	1262	47	2	.....	.....	.....	82	71
Board of Health (doses)	611	3584	2250	4515	159	2	.....	.....	.....	82	71
Public School Board (cases)	2320	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Public School Board (doses)	3771	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Separate School Board (cases)	461	324	.....	.....	.....	.....	.....	.....	.....	.....	.....
Separate School Board (doses)	461	947	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total Cases	1072	3805	436	1262	47	2	.....	.....	.....	82	71
Materials distributed to											
Private Physicians	454	517	35	352	14	.....	.....	.....	.....	1	1

COMMUNICABLE DISEASE, 1942-1946

	1946		1945		1944		1943		1942	
	C	D	C	D	C	D	C	D	C	D
Actinomycosis.....									2	
Chickenpox.....	934		1389		1793		745		726	
Diphtheria.....	3		2		5		111	1	7	2
Diphtheria carriers.....	5		5		16		12		4	
Dysentery.....							2			
Encephalitis.....	4	2		1			3			
Erysipelas.....	23		19		17		18		17	
Influenza.....		6		2		6		11		8
Measles.....	2563	1	444		2420		1926	1	673	
Meningitis (Meningococcic).....	4		4		3	2	9	2	3	1
Mononucleosis (infectious).....					1					
Mumps.....	1378		1880		397		1076		2006	
Paratyphoid.....	1				1		1		1	
Poliomyelitis.....	8				5		7			
Pneumonia (lobar).....	1	8	2	15		9		11		6
Puerperal Septicaemia.....						1				
Rubella.....	183		277		77		330		653	
Scarlet Fever.....	173		374		1010	1	513	2	512	
Septic Sore Throat.....	2		7		4		8		24	
Tuberculosis (Pulmonary).....	78	20	64	26	69	20	133	15	68	17
Tuberculosis (other forms).....	2	10		2	2	6	4	5	6	7
Typhoid Fever.....			2				1			
Undulant Fever.....	2		3		1					
Vincent's Angina.....	7		28	1	20		1		1	
Whooping Cough.....	92		237		222	2	856	2	356	1
Venereal Disease—										
Gonorrhoea.....	642		479		308		209		155	
G. C. Vaginitis.....	3		12		4		4			
Syphilis.....	81	4	108	5	74	6	38	7	74	5
Type Undetermined.....	12		5							
	6201	51	5341	53	6449	53	5908	57	5287	47
Morbidity per 1,000 population.....	53.9		47.6		60.3		56.0		54.5	

C—Cases.
D—Deaths.

During 1946 reportable diseases were responsible for 51 or 5.2 of the 968 City deaths.

Of the 51 deaths from communicable disease, 44 were over 19 years of age and 30 were due to all forms of Tuberculosis, and 4 to Syphilis.

Of the 6,201 cases of communicable disease, 2,563 or 41.3% were due to Measles; 1,378 or 22.2% were due to Mumps. There were 173 cases of Scarlet Fever or 2.7% of the total number of communicable diseases reported.

	No. of Cases	Percent of Cases	No. of Deaths	Percent of Deaths
Pre-school cases—1 to 5 years.....	1882	30.4	4	7.8
School cases—6 to 14 years.....	2919	47.1	2	2.0
Over 15	1283	20.7	45	90.2
Age not stated	97	1.4		
Armed forces	20	.4		

COMMUNICABLE DISEASE BY AGE, 1946

	City Cases	Male	Female	Under 1	1/4	5/14	15/19	Over 20	Not Armed Outside Stated Forces Cases	Not Armed Outside Stated Forces Cases
Chickenpox.....	934	455	479	41	255	566	23	37	7	13
Diphtheria.....	3	2	1	.....	1	1	.....	1	.....	6
Diphtheria carriers.....	5	3	2	1	1	3	.....	.....	.....	4
Encephalitis.....	4	2	2	.....	.....	2	.....	2	.....	3
Erysipelas.....	23	11	12	2	3	2	.....	16	.....	3
Measles.....	2563	1250	1313	89	1108	1271	31	43	18	24
Meningitis (Meningococcic).....	4	1	3	1	.....	1	.....	2	.....	1
Mumps.....	1378	652	726	6	221	827	96	195	28	18
Paratyphoid.....	1	.....	1	.....	.....	.....	.....	1	.....	.....
Pneumonia (lobar).....	1	1	.....	1	.....	.....	.....	.....	.....	1
Polioomyelitis.....	8	6	2	.....	2	5	.....	1	.....	43
Rubella.....	183	53	130	1	48	101	15	18	.....	6
Scarlet Fever.....	173	68	105	1	40	98	10	17	6	19
Septic Sore Throat.....	2	1	1	.....	.....	1	.....	1	.....	.....
Tuberculosis (Pulmonary).....	78	42	36	.....	1	3	14	52	7	8
Tuberculosis (other forms).....	2	2	.....	.....	.....	.....	.....	1	1	.....
Tularaemia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Typhoid Fever.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Undulant Fever.....	2	.....	2	.....	.....	.....	1	1	.....	2
Vincent's Angina.....	7	6	1	.....	.....	1	.....	.....	.....	1
Whooping Cough.....	92	45	47	17	39	36	.....	1	5	2

Venereal Disease—

Gonorrhoea.....	642	395	247	1	.....	.....	90	532	19	.....
G. C. Vaginitis.....	3	.....	3	.....	.....	1	1	1	.....	.....
Syphilis.....	81	43	38	2	.....	.....	5	66	8	.....
Type Undetermined.....	12	7	5	.....	.....	.....	2	7	3	.....
TOTALS.....	6201	3045	3156	163	1719	2919	288	995	997	157

DEATHS :

Encephalitis.....	2	1	1	.....	.....	.....	.....	2	.....	.....
Influenza.....	6	4	2	1	.....	.....	.....	5	.....	.....
Measles.....	1	1	.....	.....	.....	1	.....	.....	.....	.....
Pneumonia (lobar).....	8	7	1	1	1	.....	.....	6	.....	.....
Tuberculosis (pulmonary).....	20	8	12	.....	.....	.....	.....	20	.....	.....
Tuberculosis (other forms).....	10	5	5	.....	1	1	.....	8	.....	.....
Syphilis.....	4	3	1	.....	.....	.....	.....	4	.....	.....
TOTALS.....	51	29	32	2	2	2	.....	45	.....	.....

COMMUNICABLE DISEASE BY SEASON AND SEX, 1946

	City Cases	Male	Female	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Outside Cases
Chickenpox.....	934	455	479	73	59	45	51	42	59	65	40	47	110	152	191	13
Diphtheria.....	3	2	1						1	1						6
Diphtheria carriers.....	5	3	2							3			1		1	4
Encephalitis.....	4	2	2													3
Erysipelas.....	23	11	12	5	1	2	1	2		3			3		1	3
Measles.....	2563	1250	1313	12	9	53	165	523	873	502	77	20	25	169	135	24
Meningitis (Meningococcic).....	4	1	3			1				1			1		1	1
Mumps.....	1378	652	726	181	126	166	194	162	120	82	56	57	63	87	84	18
Paratyphoid.....	1		1									1				2
Pneumonia (lobar).....	1	1								1						1
Poliomyelitis.....	8	6	2					1	1	2	4					43
Rubella.....	183	53	130	8	17	19	40	28	20	8	4	5	5	12	17	6
Scarlet Fever.....	173	68	105	20	16	23	22	27	14	13	7	11	12	6	2	19
Septic Sore Throat.....	2	1	1		1										1	
Tuberculosis (Pulmonary).....	78	42	36	3	2	8	17	12	8	5	3	5	4	8	3	8
Tuberculosis (other forms).....	2	2						2								
Tularaemia.....																2
Typhoid Fever.....																2
Undulant Fever.....	2		2						1		1					2
Vincent's Angina.....	7	6	1	1		1	1		1		3					1
Whooping Cough.....	92	45	47	5	9	8	21	17	8	6	2	2	4	6	4	1
Venereal Disease—																
Gonorrhoea.....	642	395	247	46	47	58	41	76	59	42	54	65	49	39	66	
G. C. Vaginitis.....	3		3				1								2	
Syphilis.....	81	43	38	9	8	8	3	5	5	7	7	3	8	7	11	
Type Undetermined.....	12	7	5				2	5	1	1		2	1			
TOTALS.....	6201	3045	3156	363	295	393	563	903	1174	742	258	218	286	487	519	157

DEATHS:

Encephalitis.....	2	1	1	1								1				
Influenza.....	6	4	2	3	1	1		1								
Measles.....	1	1						1							1	
Pneumonia (lobar).....	8	7	1	3	1	1	1			1					1	
Tuberculosis (pulmonary).....	20	8	12	1	4	2	2	3	1			2	1		4	
Tuberculosis (other forms).....	10	5	5	1		1		3	2		1	1		1		
Syphilis.....	4	3	1	1		1		1				1				
TOTALS.....	51	29	22	10	6	6	3	8	3	1	1	5	1	1	6	.....

TUBERCULOSIS CONTROL

Kinsmen's Club Service:	1946	1945
Total visits by nurse	3196	3381
Visits to T.B. cases	741	664
Visits to suspect cases	134	68
Visits to contact cases	2125	2365
Not seen, moved, etc.	50	59
Co-operative visits	146	225

Provincial Tuberculosis Division:

Examinations—

Active cases	119	119
Suspects	167	99
Contacts	511	306
Non-contacts	1069	1013
Total examinations	2883	2397
Total X-Rays	2731	2161
Tuberculin tests made	1598	1128
Tuberculin tests, positive	575	449
Mobile X-ray clinic	8138	27941

PUBLIC HEALTH NURSING

Again we had a very busy year at the Baby Clinic having a large number of very young babies. 2,209 new admissions were made with 97 re-admissions making a total of 2,306 and being 411 above the previous year.

At intervals during the year we encountered diarrhea in the new baby, at times quite serious.

One hundred and fifty-three out-of-town cases were in attendance and 66 letters were written with regard to the care and feeding of babies.

	1946	1945	1944	1943	1942
Number of clinics held	200	200	200	150	101
Babies in attendance (under 2 years)	6857	6208	6198	5649	4905
Pre-school in attendance	1310	1212	1158	1067	1146
Total	8167	7420	7356	6716	6051
Average	41	37	37	45	60
New cases admitted, babies	1881	1523	1378	1320	1119
New cases admitted, pre-school	328	281	262	240	61
Babies referred to family doctor	10	9	25	31	21
Pre-school referred to family doctor	21	16	20	36	24
Re-admitted babies	4	10	11	....	....
Readmitted pre-school	93	81	81	....	....

Dr. Mildred Newell was in attendance at the Tuesday clinics as usual, and Dr. Margaret Collins, attended the Friday clinics on the retirement of Dr. Folinsbee.

B.Sc. and Public Health nurses from the University of Alberta were with us for observation at Clinics and field work. We also had nurses from the Royal Alexandra hospital at the clinics.

Miss Blanche Emerson retired on December 1st, and since that time Miss E. Lee has been on duty.

One thousand, two hundred and thirty-six visits were made to babies and 249 to pre-school children.

VICTORIAN ORDER OF NURSES

	1946	1945	1944	1943	1942
Pre-natal visits	198	422	545	347	399
Obstetrical (nursing care)	0	8	19	87	77
Obstetrical (advice)	1333	1182	1147	1157	693
Newborn (nursing care)	657	559	666	743	453
Newborn (health supervision)	1796	1654	1373	1287	857
Pre-natal clinics	49	51	49	46	49
Total attendance	577	768	982	658	500
Average attendance	12	15	20	14	10
Mothers enrolled	115	136	....	....	....



HEALTH INSPECTIONS

INSPECTIONS:

	1946	1945
Dwellings	1,048	9,479
Hotels, lodging houses, apartment blocks.....	936	1,147
Schools, blocks, public buildings	15	38
Stores, business establishments	769	965
Food handling establishments	2,948	2,598
Garbage cans, etc.	903	1,970
Streets, lanes, yards, dumps, etc.....	924	2,186
Miscellaneous	2,662	3,188
	<u>10,205</u>	<u>21,571</u>
Re-inspections	571	4,552
Visits assisting quarantine officer	860	55

NOTICES:

Written	819	2,042
Verbal	2,464	4,895
Garbage	491	1,038

COMPLAINTS:

Received from public	648	602
Justified	601	565
Received from other departments	10	27
Referred to other departments	74	52

The complaints were made up as follows:

Garbage, streets, lanes, etc.....	233	186
Vermin	65	147
Housing, plumbing and drainage	230	190
Food and drink	40	29
Miscellaneous	80	50

LICENSES:

License applications investigated	2,660	2,392
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PLUMBING:

Sewer and water notices issued	9	7
Sewer and water installed, buildings removed, etc.....	14	35
Extension of time granted	20	30
Plumbing permits issued	1,603	1,244
Plumbing permits issued for old buildings	33	44
Alterations to existing plumbing (fixtures).....	631	1,232
Privies eliminated through installation of plumbing.....	33	44
Number of septic tanks installed.....	8	5

DISINFESTING STATION:

Baths	3,797	4,005
Verminous	7	....
Scabies	413	409
Disinfested	413	411
No. of Men Washing Clothes	2,564	2,504
Units Washed	7,743	7,206
Articles sterilized for the Army.....	65	2,425

SCAVENGING CLEAN-UP WORK

Refuse removed during Clean-up Week (cubic yards).....	10,850	8,140
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ANIMALS, BARNS, STYES:

Cow owners	209	392
Hog owners	89	103
Goat owners	39	38
Fur Farm owners	84	64

FOOD:

Samples submitted to Provincial Laboratory	25	12
Foodstuffs condemned (lbs)	279,710	1.588

WATER:

Water samples taken	23	14
Negative	11	14
*Positive	11	3
*Suspicious	1	....
Wells chlorinated	3	2
Wells placarded	2	1
Ice samples	1	2

*—Wells condemned or further samples taken after chlorination.

HOUSING:

There were 1,048 dwellings and 936 hotels, lodging houses, apartment blocks, etc. checked for vermin, overcrowding and other insanitary conditions. Notices were issued where necessary.

POISON GAS FUMIGATION:

The use of DDT for destruction of vermin has greatly reduced the use of hydrocyanic acid gas for this purpose. In only sixty cases was the gas employed during the year.

ENFORCEMENT OF REGULATIONS:

Prosecutions	0	3
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FOOD INSPECTION

MEATS INSPECTED AND CONDEMNED

Beef:

	1946	1945	1944
No. of carcasses inspected	3,026	2,623	3,206
Carcasses condemned	10	37	26
Portions condemned	249	189	293
Weight (lbs.) of carcasses and portions condemned....	8,675	19,960	19,285

Veal:

No. of carcasses inspected	2,275	2,075	2,137
Carcasses condemned	2	3	5
Portions condemned	49	32	55
Weight (lbs.) of carcasses and portions condemned....	940	1,245	1,640

Mutton:

No. of carcasses inspected	1,348	1,634	1,850
Carcasses condemned	3	13	17
Portions condemned	65	59	102
Weight (lbs.) of carcasses and portions condemned....	270	815	1,130

Pork:

No. of carcasses inspected	3,304	4,656	3,721
Carcasses condemned	65	58	57
Portions condemned	986	1,399	978
Weight (lbs.) of carcasses and portions condemned....	24,765	28,305	22,710

Totals:

No. of carcasses inspected.....	9,953	10,988	10,914
Carcasses condemned	80	111	105
Portions condemned	1,349	1,679	1,428
Weight (lbs.) of carcasses and portions condemned....	34,650	50,325	44,765

CARCASSES FOUND TO BE INFECTED WITH T.B.

Beef:

Infected	11	13	8
Percent .....	.363	.495	.230

Pork:

Infected	565	712	524
Percent	17.10	15.29	14.08

CHIEF CAUSES OF CONDEMNATION, 1946

Beef:	Carcasses	Portions	Weight Lbs.
Abscess	---	84	1,010
Actinomycosis	1	85	2,245
Adhesions	---	12	180
Bruised	6	6	3,030
Parasites	---	34	365
Tuberculosis	---	12	220
Jaundice	---	14	165
Miscellaneous (emaciation, parturition, not bled, stomatitis)	3	2	1,460
	10	249	8,675

Veal:	Carcasses	Portions	Weight Lbs.
Abscess .....	....	18	190
Actinomycosis .....	....	9	135
Parasites .....	....	12	120
Bruised	1	5	385
Miscellaneous (adhesions, jaundice, immaturity).....	1	5	110
	2	49	940

Mutton:			
Parturition	2	....	135
Parasites .....	....	65	85
Not bled	1	....	50
	3	65	270

Pork:			
Adhesions	4	37	1,080
Abscess multiple	13	3	2,590
Arthritis	11	....	1,675
Bruised	3	29	1,125
Contamination .....	....	64	1,035
Parasites .....	....	133	290
Tuberculosis	8	710	11,965
Pneumonia	16	....	2,900
Rhinitis	3	6	560
Miscellaneous (abscess, peritonitis, bull nose pneumonia, septicaemia, infection)	7	4	1,545
	65	986	24,765

DISEASED ANIMALS

	1946	1945	1944
Beef	227	164	238
Veal	38	26	48
Mutton	63	22	102
Pork	788	770	674
Total amount of meat condemned	34,650	50,325	44,765

FOODSTUFFS CONDEMNED BY INSPECTORS

Canned goods	111	15	....
Fruit and vegetables	3	154	105
Meat	256	....	61
Fish .....	....	1,140	....
Poultry	198	250	193
Cheese	2	....	....
Damaged by Fire	279,133	....	2,424
Sundries	7	29	80
Total (lbs.)	279,710	1,588	2,863

DAIRY INSPECTION

1946

Certificates issued Producer-distributors, raw milk.....	15
Certificates issued Producer-shippers, milk	285
Certificates issued Producer-shippers, cream	36
Certificates issued Pasteurization Plants	5
Inspections of Producer-distributors and Dairies	79
Inspections of Producer-shippers' Dairies	1,105
Inspection of Pasteurization Plants	54
New Dairy Barns erected	18
Dairy Barns remodelled	4
New Milk Houses erected	21
Certificates suspended temporarily	125
Certificates suspended indefinitely	---
Applications for certificates of registration refused.....	---
Certificates issued to retail distributors	381
Permits issued to cowkeepers in the city.....	209
Reduction tests, milk	12,877
Reduction tests, cream	52
Sediment tests	769
Butterfat tests	784
Phosphatase tests	279
Bacterial plate counts, milk	465
Bacterial plate counts, ice cream	52
Chlorine tests at dairy farms	30
Well water samples taken at dairy farms.....	---
Milk can condemned	---
Written notices to dairy premises	125
Educational circulars to cream producer-shippers.....	---
Prosecutions	---

During 1946 the number of producer-distributors of raw milk decreased from fifteen to twelve.

LABORATORY REPORT

Laboratory control work and plant inspection has been carried on much as in previous years. Our demand for milk still seems to outrun our efforts to provide satisfactory supply.

There were 776 retail milk samples taken during the year, all of which were examined for butterfat content, solids not fat, sediment and flavor. Methylene Blue reductive tests were also carried out on all these samples and over half submitted to test for bacteria count. On these exceeding 50,000, duplicate samples were taken within a short time for re-count. The pasteurized milk samples were also examined at least twice a month by the phosphatase test. A summary of the results obtained is given in the following tables.

Table No. 1, Retail Milk Samples—Bacteria Counts

	Special	15,000/ 40,000	40,000/ 100,000	100,000/ 300,000	Over	Spreader	Total
January	31	6	2	....	....	1	40
February	31	5	5	....	....	1	42
March	20	13	9	5	....	....	47
April	25	9	6	....	3	....	43
May	25	12	2	....	2	....	41
June	30	6	3	3	1	....	43
July	30	3	3	....	....	....	36
August	22	11	7	1	....	1	42
September	9	6	1	2	1	....	19
October	26	10	2	....	....	....	38
November	20	9	9	2	....	....	40
December	24	6	3	1	....	....	34
	293	96	52	14	7	3	465
Percentage	63.4	20.8	11.3	3	1.5		100

The three results lost by the growth of spreaders are excluded in calculating the percentage in each group.

These results are also shown broken down into the different groupings in the following tables:

Table No. 2

	Special	15,000/ 40,000	40,000/ 100,000	100,000/ 300,000	Over	Spr.	Total
Raw Milk.....	85-42.1%	57-28.2%	44-21.8%	12- 5.9%	4-2.0%	1	203
Pasteurized	121-80.6	25-16.6	2- 1.3	1- .67	.....	1	150
Jersey	31-75.5	6-14.7	3- 7.4	.....	1-2.4	..	41
Homogenized	56-78.9	8-11.2	3- 4.3	1-1.4	2-2.8	1	71
	293	96	52	14	7	3	465

Table No. 3

	Number	Average
Retail samples, butterfat	776	3.74%
Retail samples, solids not fat	776	8.60%
Retail samples, sediment	769	9.4 %
Special creams—butterfat	30	10.03%
Special milks—butterfat	82	3.53%
Chocolate Milks, butterfat	83	2.29%
Phosphatase tests	279	

Special samples were taken for the army supply depot and for one of the railways and given the usual tests. As the military authorities attach considerable importance to the test for coliform oranisms this test was done on all their samples. The results are as listed:

Table No. 4, Bacteria Counts—Special Milks and Creams

Special Creams	30-12 in Special Class
Special Milks	96-53 in Special Class
Chocolate Milks	83-58 in Special Class
Ice Cream	52-12 in Special Class
Rinse Bottles	Nil
Special Milks, coliform organisms	55

The major portion of the work is still the control of the raw milk as received at the dairy plants. The number of shippers and number of samples are still increasing. Due to the necessity of taking on many producers not previously under supervision and also to the fact that due to recurring milk shortages, we have been forced to carry on with shippers who would normally be suspended. The number of tests under the required 5½ hours has considerably increased. The results of the methylene blue tests both on these plant and retail samples are as listed.

Table No. 5—Methylene Blue Tests

	Number	Under 5½ Hours
Producer's Milk	13,161	1,242
Retail Samples	794	.....
Special Tests	51	.....

Regular inspection and supervision has been given as previously to the operation of the swimming pools, both City and privately owned. Test solutions and apparatus have been made up and supplied as needed and samples of the water and occasionally of the sterilizing agents taken for examination. There were 182 samples of pool water examined from city pools of which 31 failed to meet the accepted bacterial standard. (This does not constitute a failure in compliance as under the standards used a certain small proportion are allowed to exceed the maximum if they are not closely recurrent.) In 9 samples the examination was spoiled by the growth of spreaders. There were 85 samples taken from the private pools of which 13 gave counts below standard. None of the samples showed presence of coliform organisms in amounts tested.

Samples of tap water were examined for us almost daily by the Provincial Laboratory. Out of 275 samples so tested, 230 gave counts of 10 or under while only 6 gave over 50. Daily checks were made on the chlorine in the water and the close collaboration was maintained with the water treatment at all times.

Occasional visits have been made to the various sewage plants which have been carrying on satisfactorily.

